Technical Analysis in the Matter of:

Responsibility for Cleanup of Petroleum Hydrocarbon Waste Discharged from the Chevron Products Company Underground Pipeline Beneath Belt Street in San Diego, California

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Prepared by

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List of Exhibits

Exhibit No.	Exhibit Title			
Exhibits S	Exhibits Submitted by the City of San Diego			
City 1	and Agra Earth and Environmental, Inc., dated February 4, 2000			
City 2	"Directive for Groundwater Investigation Report Pursuant to California Water Code Section 13267," issued by the City of San Diego, dated December 10, 2001			
City 3	The City of San Diego's Points & Authorities RE: No Liability for Belt Street Workplan, dated January 17, 2002			
City 3.1	"Hazmat Incident Report 2001", Attachment 1 to The City of San Diego's Points & Authorities RE: No Liability for Belt Street Workplan, dated January 17, 2002			
City 3.2	Letter titled, "Revised Proposal, Annual Geotechnical Consultant Agreement Task No. 17, Water Groups 525B, 525C, and 525D, Work Order Nos. 184131, 181141,			
Letter titled, "Annual Geotechnical Consultant Agreement (R-290801, Aud 9900231), Task No. 17, Water Groups 525B, 525C, and 525D, W.O. Now. 184141, and 184101," issued by The City of San Diego, dated December 15 Attachment 3 to The City of San Diego's Points & Authorities RE: No Liab Belt Street Workplan, dated January 17, 2002				
City 3.4	Fax titled, "Water Group 525 (B, C, D)," issued by AMEC, dated January 19, 2001, Attachment 4 to The City of San Diego's Points & Authorities RE: No Liability for Belt Street Workplan, dated January 17, 2002			
City 3.5	Letter titled, "Voluntary Assistance Program Case #H03791-004, Chevron Products Company Terminal #100-1252, Lower Tank Farm, 2295 Belt Street, San Diego, California," issued by the County of San Diego Department of Environmental Health, dated December 5, 2001, Attachment 5 to The City of San Diego's Points & Authorities RE: No Liability for Belt Street Workplan, dated January 17, 2002			
Exhibits Si	ubmitted by AMEC Earth and Environmental			
AMEC 1	Letter titled, "Rupture of Chevron pipeline/Belt Street," issued by John M. Dillard, dated September 26, 2001			
AMEC 2	Letter titled, "Re: Water Code Section 13267 Letter of November 13, 2001," issued by John M. Dillard, dated December 10, 2001			
AMEC 3	"Rupture of Chevron pipeline/Belt Street," by John M. Dillard, dated January 23, 2002			
AMEC 3.1	Letter titled, "Annual Geotechnical Consultant Agreement Task No. 17 – Water Groups 525B, 525C, and 525D, Work Group Nos., 184131, 181141, and 184101," issued by the City of San Diego, dated November 16, 2000, Attachment 1 to "Rupture of Chevron pipeline/Belt Street," by John M. Dillard, dated January 23, 2002			

Exhibit No.	Exhibit Title			
AMEC 3.2	dated November 30, 2000, Attachment 2 to "Rupture of Chevron pipeline/Belt Street," by John M. Dillard, dated January 23, 2002			
AMEC 3.3	Letter titled, "Annual Geotechnical Consultant Agreement (R-290801, Aud. Cert. 9900231), Task No. 17, Water Groups 525B, 525C, and 525D, W.O. Now. 184131, 184141, and 184101," issued by The City of San Diego, dated December 15,2000, Attachment 3 to "Rupture of Chevron pipeline/Belt Street," by John M. Dillard, dated January 23, 2002			
AMEC 3.4	Fax from Underground Service Alert of Southern California, dated September 4, 2001, Attachment 4 to "Rupture of Chevron pipeline/Belt Street," by John M. Dillard, dated January 23, 2002			
AMEC 3.5	California Government Code 4216, Attachment 5 to "Rupture of Chevron pipeline/Belt Street," by John M. Dillard, dated January 23, 2002			
AMEC 3.6	Drawings Numbers 021-018, 2516-B sheet 1 of 3, 2516-B sheet 2 of 3, and 2516-B sheet 3 of 3, prepared by the San Diego Unified Port District, dated February 2, 1994, October 31, 1977, October 31, 1977, and October 31, 1977, respectively, Attachment 6 to "Rupture of Chevron pipeline/Belt Street," by John M. Dillard, dated January 23, 2002			
AMEC 3.7	E-Mail from Michael Vernetti to George McCandless and Nasser Sinoit (February 7, 2001), from Michael Vernetti to Julie Chan (February 7, 2001), and from Scott Weldon to George McCandless (February 7, 2001), Attachment 7 to "Rupture of Chevron pipeline/Belt Street," by John M. Dillard, dated January 23, 2002			
AMEC 3.8	Letter titled, "Quarterly Remediation System Operation Report from October 1 through December 21, 2000," issued by TRC, dated January 26, 2001, Attachment 8 to "Rupture of Chevron pipeline/Belt Street," by John M. Dillard, dated January 23, 2002			
AMEC 3.9	Telephone Conversation notes between Scott Weldon, James Bryson, and Mark Sigler (April 18, 2001), Scott Weldon and Mark Sigler (April 18, 2001), and Meeting Notes (May 21, 2001), Attachment 9 to "Rupture of Chevron pipeline/Belt Street," by John M. Dillard, dated January 23, 2002			
AMEC 3.10	Letter titled, "Voluntary Assistance Program Case #H03791-004, Chevron Products Company Terminal #100-1252, Lower Tank Farm, 2295 Belt Street, San Diego, California," issued by the County of San Diego Department of Environmental Health, dated December 5, 2001, Attachment 10 to "Rupture of Chevron pipeline/Belt Street," by John M. Dillard, dated January 23, 2002			
Exhibits Si	ubmitted by Tri-County Drilling, Inc.			
Tri- County 1	Letter titled, "Directive for Groundwater Investigation Report Pursuant to California Water Code Section 13267, Belt Street Pipeline Rupture, San Diego, CA," issued by Tri-County Drilling, Inc., dated January 16,2002			

Exhibit No.	Exhibit Title				
Exhibits Submitted by Chevron Products Company					
Chevron 1	1 issued by Guevara, Phippard & James, dated January 24, 2002				
Chevron 2					
Chevron 3	Declaration of Santana Gonzalez, dated January 16, 2002				
Chevron 4	Declaration of Mark Sigler, dated January 24, 2002				
Chevron 4.1	Photograph of Ruptured Chevron pipeline, Exhibit "A" to the Declaration of Mark Sigler, dated January 24, 2002				
Chevron 4.2	Drawing titled, "Pipe Line Routing to Lower Tank Farm, San Diego Terminal, San Diego, California," drawing number N-4948-1, dated December 1973, Exhibit "B" to the Declaration of Mark Sigler, dated January 24, 2002				
Chevron 4.3 Drawing titled, "Plans for Improvements of Belt Street Trunk Sewer," drawing number 29453-1-D, dated March 14, 2000, Exhibit "C-1" to the Declaration of N Sigler, dated January 24, 2002					
Chevron 4.4 Drawing titled, "Plans for Improvements of Belt Street Trunk sewer, Plan and Profile STA 20+00 to STA 30+00," drawing number 29453-4-D, dated March 2000, Exhibit "C-2" to the Declaration of Mark Sigler, dated January 24, 2002 Report titled, "Draft report of Geotechnical Investigation, Belt Street Trunk Se Replacement Project," prepared by Allied Geotechnical Engineers, Inc., dated January 25, 2000, Exhibit "D" to the Declaration of Mark Sigler, dated January 2002					
			Chevron 5 Declaration of Paul Coon, dated January 24, 2002		
Chevron 6	Declaration of James J. Weaver, dated January 24, 2002				
Chevron 7	Declaration of James P. Bryson, dated January 23, 2002				
Regional I	Board Exhibits				
Regional Board 1	"Interim Groundwater Cleanup Goals Pursuant to Regional Board Supplemental Instructions to State Water Board December 8, 1995, Interim Guidance on Required Cleanup at Low-Risk Fuel Contaminated Sites," dated April 1, 1996 [as revised on July 23, 1996], prepared by the San Diego Regional Water Quality Control Board				
Regional Board 1	Report titled, "Chevron Harbor Terminal Facility 100-1252, National Steel and Shipbuilding Company Gate 14, 2351 Harbor Drive, San Diego, California, Emergency Response and Remedial Action Report," dated July 27,2001, prepared by TRC				
Regional Board 2	Telephone Log – Barry Pulver and Tim Duddie, dated October 12, 2001				

Exhibit No.	Exhibit Title				
Regional Board 3	Directive for Groundwater Investigation Report Pursuant to California Water Code Section 13267, Belt Street Pipeline Rupture, San Diego, California, dated November 13, 2001				
Regional Board 4 Report titled, "Workplan for Groundwater Well Installation, Belt Street Pip Rupture, San Diego Harbor Terminal, Facility No. 100-1252, 2351 North F Drive, San Diego, California," dated December 17, 2001, prepared by Hard					
Regional Board 5	Letter titled, "Notice of Hearing Regarding Responsibility for the Cleanup of Waste Discharged from the Underground Fuel Pipeline Beneath Belt Street in San Diego, California," dated January 4, 2002, issued by the Regional Board				
Regional Board 6	Letter titled, "Workplan for Groundwater Well Installation, Belt Street Pipeline Rupture, Prepared by Harding ESE on Behalf of Chevron Petroleum Products, Dated December 17, 2001," dated January 8, 2002, issued by the Regional Board				

EXECUTIVE SUMMARY

On February 1, 2001, Tri-County Drilling, Inc. (Tri-County) ruptured an underground gasoline pipeline during the drilling of a soil boring. AMEC Earth and Environmental, Inc. (AMEC) directed Tri-County to drill the soil boring at a location designated by AMEC as part of a geotechnical investigation conducted along Belt Street by AMEC for the City of San Diego (City). Tri-County was a contractor to AMEC, the geotechnical consultant hired by the City to conduct the investigation. The pipeline is an eight-inch diameter, steel, underground, fuel pipeline owned and operated by Chevron Products Company (Chevron). It contained unleaded gasoline at the time of the rupture. The pipeline was used to transport fuel between the upper and lower Chevron Bulk Fuel Terminals. The rupture of the pipeline caused an immediate release of an estimated 400 to 2,730 gallons of unleaded gasoline into soil and groundwater.

The site is located in the Chollas Hydrologic Subarea (908.22) of the San Diego Mesa Hydrologic Area (908.20) of the Pueblo San Diego Hydrologic Unit (908.00). The Water Quality Control Plan for the San Diego Basin (Basin Plan) indicates that groundwater in the Chollas Hydrologic Subarea has been "exempted by the Regional Board from the municipal use designation under the terms and conditions of State Board Resolution No. 88-63, *Sources of Drinking Water* Policy." Although groundwater at the site is exempted from the sources of drinking water policy, groundwater at the site flows towards San Diego Bay.

There are existing and potential beneficial uses of San Diego Bay designated in the Basin Plan. Those uses which could be affected if contaminated groundwater at the site flows into San Diego Bay include:

- Contact Water Recreation
- Commercial and Sport Fishing
- Marine Habitat
- Wildlife Habitat
- Rare, Threatened, or Endangered Species
- Shellfish Harvesting

The San Diego Regional Water Quality Control Board (Regional Board) has issued interim cleanup goals for groundwater within 1,000 feet of a marine surface water (Regional Board Supplemental Instructions to State Water Board December 8, 1995, Interim Guidance on Required Cleanup at Low-Risk Fuel Contaminated Sites, dated April 1, 1996 [as revised on July 23, 1996]). These groundwater cleanup goals are protective of the water quality needed to support the designated beneficial uses of the marine water body if the groundwater discharges into the marine water body.

On November 13, 2001, pursuant to California Water Code (Water Code) section 13267, the Regional Board directed the City, AMEC, and Tri-County to undertake an investigation of the discharge by preparing a preliminary site conceptual model and workplan to conduct a soil and groundwater investigation to delineate the extent of soil and groundwater contamination at the site and to determine possible impacts to the water quality of San Diego Bay, to human health and to the environment. The reports were due to the Regional Board by January 25, 2002.

AMEC and the City contend that they are not responsible for the discharge and therefore are not subject to the mandates of Water Code section 13267. Both parties claim that Chevron is responsible for the discharge because it failed to register the underground pipeline with a regional notification center as required by State law. Further, the City and AMEC claim that the Regional Board's directive to submit reports failed to establish that the burden of providing the reports bears a reasonable relationship to the need for the reports and the benefits of the reports as required by Water Code section 13267. In response to the request by the City and AMEC the Regional Board notified the City, AMEC, Tri-County, and other interested parties of its intent to had an informal hearing and gave notice the they should submit written testimony and evidence regarding the following key issues by January 18, 2002:

- Did the City of San Diego cause or permit waste to be discharged into the waters of the State, or deposited where it is, or probably will be, discharged into the waters of the State, when the Chevron pipeline beneath Belt Street was ruptured on February 1, 2001?
- Did AMEC Earth and Environmental, Inc., cause or permit waste to be discharged into the waters of the State, or deposited where it is, or probably will be, discharged into the waters of the State, when the Chevron pipeline beneath Belt Street was ruptured on February 1, 2001?
- Did Tri-County Drilling, Inc., cause or permit waste to be discharged into the waters of the State, or deposited where it is, or probably will be, discharged into the waters of the State, when the Chevron pipeline beneath Belt Street was ruptured on February 1, 2001?
- Did Chevron Products Company cause or permit waste to be discharged into waters of the State, or deposited where it is, or probably will be, discharged into the waters of the State, when the Chevron pipeline beneath Belt Street was ruptured on February 1, 2001?
- Does the burden of providing the required reports bear a reasonable relationship to the need and benefits of the reports?

The City, AMEC, Tri-County, and Chevron submitted hearing documents. The City, AMEC, and Tri-County all contend they should be shielded from being named as a discharger due to contractual relationships between the three entities, and that Chevron failed, as required by statelaw, to register the pipelines with Underground Service Alert of Southern California.

The terms and conditions of the contracts among the City and AMEC have no relevance to this analysis because the contracts are not binding on the Regional Board, and do not affect the parties status under Water Code sections 23267 or 13304.

Chevron provided documentation showing that the City had prior knowledge of the location of the pipelines. The failure by Chevron to register the pipelines was cured by providing the locations of the pipelines to the City. Additionally, Chevron provided evidence that AMEC did not follow industry standard of care to identify underground utilities prior to drilling. Therefore, Chevron did not cause or permit the discharge to occur.

An analysis of the reasonable costs to prepare the workplan and preliminary site conceptual model indicates that the cost would be minor. These reports will be part of an investigation to evaluate whether the release of petroleum hydrocarbon wastes will impact the existing beneficial uses of San Diego Bay. Therefore, the costs bear a reasonable relationship to the need for the report to assess the dangers to the public health and the waters of San Diego Bay posed by the unauthorized discharge and the need to mitigate those dangers.

1.0 INTRODUCTION

The City of San Diego (City) and AMEC Earth and Environmental, Inc. (AMEC), requested a hearing on their responsibility for cleanup of petroleum hydrocarbon waste discharged from the Chevron Products Company (Chevron) underground fuel pipeline beneath Belt Street, San Diego, California (City 2 and AMEC 2). The City and AMEC contended that they are not responsible and should not be required to provide the technical and monitoring reports requested by the Regional Board pursuant to section 13267 of the California Water Code (Water Code). By letter dated January 4, 2002 the Regional Board provided notice (Regional Board 6) to the City, AMEC, Tri-County Drilling, Inc. (Tri-County), and other interested parties that a hearing would be conducted and that they could provide written testimony and evidence on the issues identified by the Regional Board in this matter.

2.0 BACKGROUND

2.1 Nature of Discharge

On February 1, 2001, Tri-County ruptured an underground gasoline pipeline during the drilling of a soil boring. Tri-County was a contractor to AMEC, a consultant hired by the City to conduct a geotechnical investigation along Belt Street. AMEC directed Tri-County to drill the soil boring at a designated location that resulted in the ruptured pipeline. The pipeline is an eightinch diameter, steel, underground, fuel pipeline owned and operated by Chevron. The pipeline contained unleaded gasoline at the time of the rupture. The pipeline is used to transport fuel between the upper and lower Chevron Bulk Fuel Terminals. The rupture of the pipeline caused an immediate release of an estimated 400 to 2,730 gallons of unleaded gasoline into soil and groundwater (Regional Board 2 and City 3.1).

Chevron collected soil samples as part of the emergency response activities (Regional Board 2). The soil samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) and as diesel (TPHd), benzene, toluene, ethylbenzene, xylenes, methyl tertiary butyl ether (MTBE), diisoproply ether (DIPE), ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), and tertiary butyl alcohol (TBA). Samples were collected from depths ranging between 5 to 11 feet below grade. The soil samples had the following maximum concentrations of petroleum compounds.

Compound	Maximum Concentration
TPHg	95,000 milligrams per kilogram (mg/kg)
Benzene	250 mg/kg
Toluene	1,900 mg/kg
Ethylbenzene	470 mg/kg
Xylenes	2,200 mg/kg
MTBE	2,400 mg/kg
TBA	250 mg/kg

Between February and March 2001, Chevron removed free product at the site, reducing the apparent free product thickness from approximately 36 to 1.5 inches (Regional Board 2).

2.2 Site Location

The site of the pipeline rupture is in the City of San Diego near the southern terminus of Sicard Street (Figures 1 and 2). The site is located within the National Steel and Shipbuilding Company (NASSCO) facility that is leased from the Port of San Diego. The underground fuel pipeline is located within a portion of Belt Street that is now located within the NASSCO facility. The site is located approximately 800 feet from San Diego Bay.

2.3 Surface Water Resources

There are existing and potential beneficial uses of San Diego Bay designated in the Water Quality Control Plan for the San Diego Basin (Basin Plan). Those uses which could be affected if contaminated groundwater at the site flows into San Diego Bay include:

- Contact Water Recreation
- Commercial and Sport Fishing
- Marine Habitat
- Wildlife Habitat
- Rare, Threatened, or Endangered Species
- Shellfish Harvesting

2.4 Groundwater Resources

The site is located in the Chollas Hydrologic Subarea (908.22) of the San Diego Mesa Hydrologic Area (908.20) of the Pueblo San Diego Hydrologic Unit (908.00). The Basin Plan indicates that groundwater in the Chollas Hydrologic Subarea has been "exempted by the Regional Board from the municipal use designation under the terms and conditions of State Board Resolution No. 88-63, *Sources of Drinking Water* Policy."

Although groundwater at the site is exempted from the sources of drinking water policy, the Regional Board has issued interim cleanup goals for groundwater within 1,000 feet of marine surface waters (Regional Board 1). These groundwater cleanup goals are protective of the water quality needed to support the designated beneficial uses of the marine water body should contaminated groundwater be discharges into the marine water body. Interim cleanup goals are summarized in Table 1.

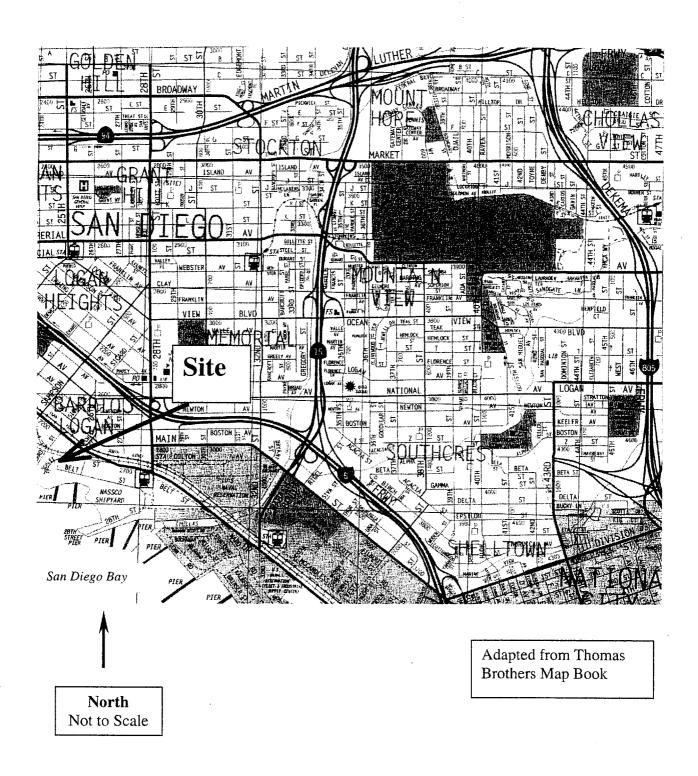
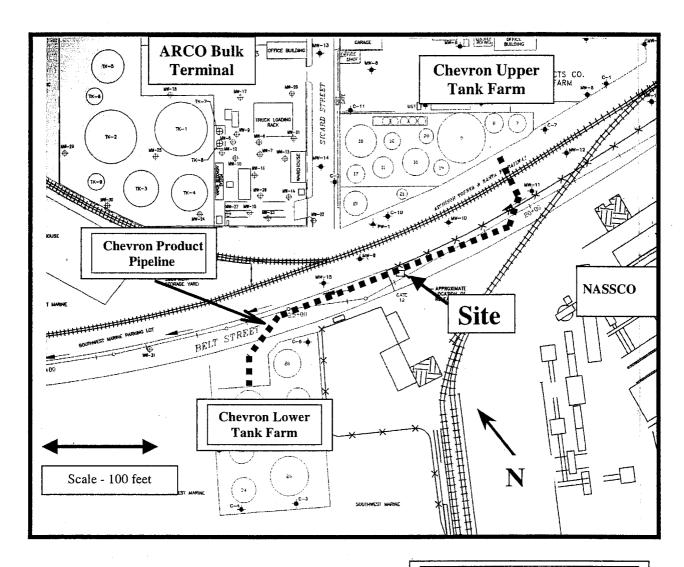


Figure 1 – Site Location Map



Adapted from "Workplan for Groundwater Well Instalaltion, Belt Street Pipeline," by Harding ESE, Dated 12/17/02

Figure 2 – Site Plan

Table 1 Interim Groundwater Cleanup Goals Pursuant to Regional Board Supplemental Instructions to State Water Board December 8, 1995, Interim Guidance on Required Cleanup at Low-Risk Fuel Contaminated Sites, dated April 1, 1996 [as revised on July 23, 1996]

Constituent	Concentration (micrograms per liter)
Benzene	400
Toluene	5,000
Ethylbenzene	430
Xylenes	10,000
Naphthalene	2,350
PNAs	300

3.0 REGULATORY ACTIONS

On November 13, 2001, pursuant to Water Code section 13267, the Regional Board ordered the City, AMEC, and Tri-County to submit a preliminary site conceptual model and a workplan to conduct a soil and groundwater investigation. The objective of the workplan, the initial phase in the soil and groundwater investigation needed to assess the potential water quality impacts to San Diego Bay from the discharge of petroleum hydrocarbon wastes, was to develop a soil and groundwater investigation to delineate the extent of soil and groundwater contamination at the site and to determine possible impacts to the water quality of San Diego Bay, to human health and to the environment (Regional Board 4). The reports were due to the Regional Board by January 25, 2002. To date, the Regional Board has not received these reports.

AMEC and the City contended that they are not responsible for the discharge and therefore are not subject to the mandates of Water Code section 13267 (City 2 and AMEC 2). Both parties claim that Chevron is responsible for the discharge because it failed to register the underground pipeline with a regional notification center as required by State law (City 2, AMEC 1, and AMEC 2). Further, the City and AMEC claim that the Regional Board's directive to submit reports failed to establish that the burden of providing the reports bears a reasonable relationship to the need for the reports and the benefits of the reports as required by Water Code section 13267 (City 2 and AMEC 2).

4.0 APPLICABLE LAW

Section 13267 of the Water Code authorizes the Regional Board to investigate water quality within the San Diego Region, including investigation into the causes and consequences of discharges to determine appropriate requirements for cleanup and abatement pursuant to Water Code section 13304.

- 13267. (a) A regional board, ... in connection with any action relating to any ... requirement authorized by this division, may investigate the quality of any waters of the state within its region.
- (b) (1) In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, ... waste within its region, ... shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.

. . .

(e) As used in this section, "evidence" means any relevant evidence on which responsible persons are accustomed to rely in the conduct of serious affairs, regardless of the existence of any common law or statutory rule which might make improper the admission of the evidence over objection in a civil action.

Section 13304 of the Water Code gives the Regional Board authority to require cleanup and abatement of waste and pollution or threatened pollution, including spills, leaks and other unplanned releases of pollutants hazardous substances such as leaks from aboveground or underground storage tanks or pipelines.

13304. (a) Any person who has ... caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and creates, or threatens to create, a condition of pollution or nuisance, shall upon order of the regional board, clean up the waste or abate the effects of the waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including, but not limited to, overseeing cleanup and abatement efforts.

Provisions of the Government Code prescribing a registration and notification mechanism for underground utility installations are not directly applicable to the issues presented in this matter inasmuch as the responsibility of the parties must be determined under the jurisdictional criteria of sections 13267 and 13304 of the Water Code. In fact, review of the Government Code provisions cited by the City and AMEC does not provide substantial guidance regarding the responsibility of the parties under the applicable provisions of the Water Code. While an operator of underground utility installations has a statutory obligation to register such installations, and may be precluded from recovery of "damages to [the operator's] subsurface installation arising from the excavation against an excavator who has complied with [prescribed] notification requirements...to the extent damages were proximately caused by the owner or operator's failure to comply," [Gov't Code 4216.7] neither registration and notification nor failure to comply does more than create presumptions of liability as between owners/operators and excavators. Nothing in the Government Code affects the responsibility of owner/operators

and excavators to third parties, or to the state for the consequences of their acts or omissions. In fact, even under the provisions of Government Code 4216.7, an excavator must establish that the owner/operator's failure to comply with the registration and notification requirements was, in fact, the proximate cause of damage. Any presumption to that effect could be defeated by demonstration that an excavator had actual knowledge of the location of underground installations, or failed to use reasonable care to ascertain the absence of unregistered installations in areas likely to have been used for such installations prior to the establishment of regional notification organizations.

5.0 KEY ISSUES

Based on the foregoing, the Regional Board identified the following key issues for hearing (Regional Board 6):

- 1. Did the City of San Diego cause or permit waste to be discharged into the waters of the State, or deposited where it is, or probably will be, discharged into the waters of the State, when the Chevron pipeline beneath Belt Street was ruptured on February 1, 2001?
- 2. Did AMEC Earth and Environmental Inc., cause or permit waste to be discharged into the waters of the State, or deposited where it is, or probably will be, discharged into the waters of the State, when the Chevron pipeline beneath Belt Street was ruptured on February 1, 2001?
- 3. Did Tri-County Drilling, Inc., cause or permit waste to be discharged into the waters of the State, or deposited where it is, or probably will be, discharged into the waters of the State, when the Chevron pipeline beneath Belt Street was ruptured on February 1, 2001?
- 4. Did Chevron Products Company cause or permit waste to be discharged into waters of the State, or deposited where it is, or probably will be, discharged into the waters of the State, when the Chevron pipeline beneath Belt Street was ruptured on February 1, 2001?
- 5. Does the burden of providing the required reports bear a reasonable relationship to the benefits of and need for the reports?
- 6.0 KEY ISSUES 1, 2, AND 3 RESPONSIBILITY OF THE CITY, AMEC, AND TRI-COUNTY FOR CAUSING OR PERMITTING WASTE TO BE DISCHARGED

Key issues 1, 2, and 3 are discussed together because the City, AMEC and Tri County made similar arguments regarding why they did not cause or permit waste to be discharged into waters of the State, or deposited where it is, or probably will be, discharged into the waters of the State, when the Chevron pipeline beneath Belt Street was ruptured on February 1, 2001.

6.1 Legal Definition of a Discharger

The City and AMEC argued that "as used in section 13304 [of the Porter Cologne Act], discharge means to relieve of a charge, load or burden;...to give outlet to; or forth; EMIT...(Webster's New Internat. Dict [3rd ed. 1961] p. 644, *California Teachers Assn. V. San Diego Community College Dist.* (1981) 28 Cal. 3d. 692,698 [170 Cal. Rptr. 817, 621 P.2d 856], *People v. Morris* (1988) 46 Cal. 3d 1, 15 [249 Cal. Rptr. 119, 756 P.2d 843], and *Lake Madrone Water District v. State Water Resources Control Board*, 209 Cal. App. 3d, 163 at page 174) (City 3, AMEC 1, and 2).

The City suggested that an "activity or factor affecting water quality" is needed to be considered a discharger, and because the City had a "TOTAL lack of activity" regarding the pipeline rupture they should not be considered a discharger (City 2).

According to section 13304, a discharger is not only the person that physically causes the release to occur, but also the person that causes, or creates the action that resulted in the discharge. The City hired AMEC to conduct a geotechnical investigation for the proposed water line (City 3.2, City 3.3, AMEC 3.1, AMEC 3.2, and AMEC 3.3). This required that AMEC drill soil borings along the alignment of the proposed water line (where AMEC and its sub-contractors could potentially encounter underground utilities). Thus, by hiring AMEC to drill the soil boring that resulted in the pipeline rupture, the City initiated the action that resulted in the discharge.

AMEC argued that it does not "fall within the context of section 13304," because "nothing that AMEC did caused the rupture of the Belt Street Pipeline" (AMEC 3). Consultants (such as AMEC) are hired by clients (such as the City) because they have the technical expertise to conduct the work. Part of this technical expertise is to properly locate and drill soil borings, in a safe manner, in order to obtain the necessary site-specific data to develop design criteria for the intended project. Therefore, in order for AMEC to "perform a geotechnical study to investigate the existing conditions along the proposed alignment and provide engineering recommendations for use in the design and the preparation of the project plans" (AMEC 3.2), it would have to select appropriate soil boring locations. Furthermore, AMEC submitted maps to the City (City 3.4) showing the locations of the proposed soil borings indicating that they did select the soil boring locations. Therefore, it was AMEC, as the City's expert geotechnical consultant, that selected the location of the soil boring that, when drilled, ruptured the Chevron pipeline. Thus, AMEC's action in selecting the soil boring location caused the discharge to occur.

Tri-County argued that it is not a discharger because it "acted solely at the direction of AMEC in all aspects of the act of drilling;" that "[Tri-County] did not direct or control in any manner the location or depth of the boring;" or control, regulate, or otherwise influence any causative factor which caused or permitted the discharge" (Tri-County 1). Tri-County also stated that "AMEC rented equipment on an hourly basis owned and operated by [Tri-County] to perform drilling and sampling services as directed by AMEC" (Tri-County 1) and therefore should not be considered a responsible party or discharger. However, the Chevron pipeline was ruptured by the act of Tri-County advancing an auger into to the pipeline. Thus, Tri-County caused the discharge to occur.

6.2 Contractual Relationships

The City argued that it is not responsible for the actions of AMEC because AMEC was an independent contractor to the City (City 3). The City provided a copy of a fully executed contract between the City of San Diego and Agra Earth and Environmental, Inc. (Agra Earth and Environmental, Inc. was purchased by AMEC subsequent to the execution of the contract) for As-Needed Services for Geotechnical Services (City 1). Section 8.4 of the contract states that "the Consultant and any Subconsultants employed by the Consultant shall be independent contractors and agents of the City" (City 1).

The terms and conditions of the contracts among the City, AMEC and Tri-County have no relevance to this decision because the contracts are not binding on the Regional Board, and do not affect the parties status under Water Code sections 13267 or 13304. Despite the City's contention that it cannot be held responsible for the negligence of independent contractors, the City is strictly responsible under the Water Code for the consequences of its own actions and the actions of its contractors engaged upon a City project at the direction of the City.

Nonetheless, it is worth addressing the City's contention that it is insulated from responsibility because AMEC and Tri-County are "independent contractors." Despite the existence of a contract that attempts to define the relationship between the City and its contractors, the terms of the contract diminish the necessary independence of a contractor who's status will serve to insulate the City from responsibility for the consequences of contractors' acts and omissions. The City stated that they "had absolutely no control as to the means, method, or location of doing the instat [sic] boring leading to the spill," (City 3). In addition, the City stated (City 3) that "the general supervisory right to control the work so as to insure its satisfactory completion in accordance with the terms of the contract does not make the hirer of the independent contractor liable for the latter's negligent acts in performing the details of the work. (McDonald v. Shell Oil Company, 44 Cal. 2d 785, 788 [1955])."

The City had control over the work in excess of the "the general supervisory right." According to section 8.5 of the Contract (City 1), the City had to give consent prior to AMEC delegating "portions of the described service" to other members of the team or Subconsultants," and designated Mr. Cliff Craft as "the principal person responsible for the delivery of all Professional Services." Section 8.5 of the Contract (City 1) stipulates that in the event "Mr. Cliff Craft becomes unavailable ...the City must be consulted as to any replacement," and finally "the City reserves the right, after consultation with the Consultant, to require removal of Consultant's employees or agents." This clause of the contract clearly demonstrates that the City had more than a "general supervisory right" including management powers of selecting AMEC employees and subcontractors to work on the Belt Street project. Because the City's role extended beyond a "general supervisory right" the citation listed above does not apply and does not exonerate the City from responsibility for the discharge.

The City also contended (City 3) that it "had absolutely no factual or legal connection to Tri-County." However, according to section 4.4 of the Contract (City 1) "the Consultant's hiring of or retaining any third parties [Subconsultants] is subject to prior approval by the City." Tri-

County was hired as a third-party (i.e. a Subconsultant) and would, in accordance with section 4.4 of the Contract (City 1), have been approved by the City. In addition, Attachment 4 to the Contract (City 1) includes a "Subconsultants List" for compliance with the City's Equal Opportunity Employment requirements. Tri-County is named on this list. Because Tri-County was included on the "Subconsultants List" the City had a factual knowledge that Tri-County would be used to drill soil borings in completion of the contract. Additionally, according to Section 4.4 of the Contract, the City would have given prior approval to AMEC to use Tri-County and therefore had a legal connection with them.

AMEC contended that because it complied with its contractual obligations with the City in regard to the drilling activities that should shield AMEC from responsibility for the discharge.

The terms and conditions of the contracts between the City and AMEC have no relevance to the parties' obligations to provide the technical and monitoring reports requested by the Regional Board under CWC sections 13267 or 13304.

6.3 Use of Reasonable Care to Discover the Location of the Pipeline

AMEC's failure to exercise reasonable care to follow established standard procedures for geotechnical consulting work caused AMEC to direct Tri-County to bore at a location where Tri-County would, inevitably drill into the pipeline. The site is located in an older, industrialized area, and within a roadway where unregistered underground utilities and improvements are likely.

In his declaration, James L. Weaver (Chevron 6) stated that "street rights of ways such as Belt Street typically contain numerous utilities and structures, both active and abandoned," and further stated that "the consulting engineer and rig operator cannot reasonably assume that all underground structures have been registered with USA Dig Alert, particularly in older industrial areas where there may be abandoned and unregistered structures." Mr. Weaver concluded (Chevron 6) that "given the obvious physical conditions of the drill site, it is my opinion that neither a supervising geotechnical consulting engineer nor an experienced drilling rig operator, could reasonably rely on the USA Dig Alert system as the *sole* [emphasis added] method of ruling out the presence of underground structures at a given boring location."

Mr. Weaver stated (Chevron 6) that AMEC failed to follow simple procedures which would have prevented AMEC from directing Tri-County to drill in the location of the pipeline. He stated (Chevron 6) that,

"...in my opinion, the appropriate standard of care in such instances, is to take the following additional steps in addition to contacting USA Dig Alert. Utilize a private utility finder to assess the boring locations. The cost of this service is minimal given the risks entailed in not using such a service (approximately \$500 to \$1,500). Had a private utility locator been used in this case, he or she would have detected Chevron's pipeline."

Mr. Weaver also stated (Chevron 6) that "it is standard practice for geotechnical engineers to request reports of prior sampling in the proposed sampling area," such as the Allied Geotechnical report (Chevron 4.5). It is Mr. Weaver's contention (Chevron 6) that information was provided in the Allied Geotechnical report that would have put AMEC on notice that utilities other than those registered with Underground Service Alert (USA) may be present in the location of the soil borings.

Although Chevron failed to register the pipeline with USA, AMEC failed to use reasonable care and follow industry standard practice to locate the pipeline and prevent Tri-County from drilling into the pipeline. Chevron's testimony supports the Regional Board's original finding that AMEC caused or permitted the discharge to occur.

7.0 KEY ISSUE 4 – CHEVRON'S RESPONSIBILITY FOR CAUSING OR PERMITTING WASTE TO BE DISCHARGED

7.1 The City's and AMEC's Knowledge of the Location of the Pipeline

The City, AMEC, and Tri-County all alleged that Chevron did not register the pipeline with USA as required by State law, and this failure was the sole and proximate cause for the pipeline rupture and the discharge of petroleum hydrocarbon wastes to the ground (City 3, AMEC 1, AMEC 3, Tri-County 1). As stated by the City (City 3), "the failure to register this pipe directly led Tri-County to drill at B-9, since the USA ticket showed no subsurface installation." Although neither the City, AMEC, nor Tri-County provided any documentation to support the allegation, Chevron did acknowledge that the pipeline was not registered (Chevron 1).

According to a declaration by Mr. Ray L. Porter, Chevron Terminal employee from September 1996 through October 2000, consulting engineers working for the City of San Diego for sewer line improvements along Belt Street contacted him regarding the location of underground product piping (Chevron 2). Mr. Porter testified (Chevron 2) that the City engineers were provided copies of maps showing the location of the underground product piping.

Chevron alleged that the location of the underground pipeline was known by the City and was included on City plans for the construction of a new sewer line within the Belt Street right-of—way. Chevron submitted as evidence a copy of City plans titled "Belt Street Trunk Sewer Improvement Plans," prepared by P&D Consultants, Inc., dated March 14, 2000 (Chevron 4.3 and Chevron 4.4). These plans are for the installation of a new sewer line within Belt Street, and cover the area of the Chevron pipeline rupture. The plans clearly mark the location of the pipeline both in plan view and in cross section. The cross sectional views (Chevron 4.3 and Chevron 4.4) are annotated not once, but twice, with the following:

"XST GAS/OIL LINES, CAUTION! EXACT ELEV UNK. CONTRACTOR TO VERIFY."

The plans (Chevron 4.3 and Chevron 4.4) also include a note in the section titled Utility Notes requiring the contractor to call several utility companies, including the following notation:

"FUEL LINES/CHEVRON (619) 232-3334."

Mr. Mark Seigler, Chevron Senior Project Manager, in his declaration (Chevron 4) stated that he obtained a copy of these plans from the City, corroborating Chevron's testimony that the City had prior knowledge of the existence and location of the pipeline. Because the City had prior knowledge of the location of the pipeline, Chevron's failure to register the pipeline with USA was not a sole or proximate cause for the rupture of the pipeline as the City and AMEC contended.

The failure of Chevron to register the pipeline is not the "sole" or "proximate cause" of the pipeline rupture. The immediate cause of the pipeline rupture was Tri-County drilling into the pipeline. Further, the City and AMEC had both actual knowledge and other means than reliance on USA to discover the location of the pipeline. Chevron provided the City with documents clearly and explicitly showing the location of the pipeline (Chevron 1, Chevron 2, Chevron 4.2). As previously discussed, AMEC failed to use reasonable, industry-accepted procedures to discover the pipeline and prevent drilling into it.

Evidence provided by Chevron demonstrates that the City had prior knowledge of the location of the underground fuel lines. Therefore, any responsibility of Chevron for failure to register the pipelines was cured by providing the City with the information regarding the location of said pipelines.

7.2 Chevron's Liability Under the Government Code

AMEC argued (AMEC 1 and AMEC 3) that "Chevron Products failed to comply with [Government Code] sections 4216, 4216.1, and is bound by 4216.7" and that "section 4216.7 imposes strict liability for non-compliance." California Government Code section 4216.7(b) is as follows:

In the case where an owner or operator of a subsurface installation has failed to comply with the regional notification center system requirements of Section 4216.1, the owner or operator shall forfeit his or her claim for damages to his or her subsurface installation arising from the excavation against an excavator who has complied with the requirements of Section 4216.2 to the extent damages were proximately caused by the owner or operator's failure to comply. This subdivision shall not affect claims, including, but not limited to third-party claims, brought against the excavator by other parties arising from the excavation.

Chevron had a responsibility to comply with this section of the government code. However, this provision of the government code does not affect the excavator's or operator's responsibility to the State under the Water Code, but only affects their respective liabilities for damages to the pipeline.

The Regional Board is only concerned with the discharge of petroleum wastes to soil and groundwater and this statute does not relieve the City, AMEC, or Tri-County of its obligations under Water Code sections 13267 and 13304.

8.0 KEY ISSUE 5 - RELATIONSHIP BETWEEN THE BURDEN OF PROVIDING THE REQUIRED REPORTS AND THE NEED FOR THE REPORTS AND THE BENEFITS OF SAME

8.1 Request for Multiple Workplans

The City alleged (City 3) that the Regional Board's directive to submit a site conceptual model and workplan requires all three parties to prepare and submit a workplan. Although the directive was issued to all three parties, the intent of the Regional Board was not to require that all three parties submit separate reports. As stated in the Regional Board's letter dated November 13, 2001 (Regional Board 4) "a preliminary conceptual model and a workplan to conduct a soil and groundwater investigation [bold added for emphasis]" were to be submitted. The City alleged (City 3) that submitting three workplans would be duplicative and wasteful. Because only one site conceptual model and one workplan were required this allegation is not true.

8.2 Cost of Preparing Workplan and Preliminary Site Conceptual Model

The City alleged (City 3) that the costs of preparing three workplans would not "bear a reasonable relationship" to the benefit. The Regional Board did not require three workplans to be submitted (Regional Board 4). Nonetheless, the following information is relevant to the cost of preparing the two required reports. Guidance regarding costs can be found in the document titled, "Cost Guidelines" prepared by the California Underground Storage Tank Cleanup Fund (Fund). Table 2 presents the costs that the Fund deems to be acceptable to prepare a preliminarily site conceptual model and workplan to conduct a soil and groundwater investigation.

Table 2
Cost Estimate to Prepare a
Preliminary Site Conceptual Model and Site Assessment Workplan

Task	Hours	Rate	Total
Review and Sign Report	1	\$125	\$125
Regulatory Liaison, Project Management, Report Preparation	10	\$90	\$900
Prepare Preliminary Site Conceptual Model	8	\$90	\$720
Prepare Workplan	12	\$75	\$900
Drafting	4	\$55	\$220
Clerical	4	\$45	\$180
		Total	\$3,045

In addition, the Regional Board required the submission of information on preferential pathways that is not normally included in a preliminary site conceptual model and workplan (Regional Board 4). The estimated cost to provide this information is presented in the Table 3.

Table 3
Cost Estimate to Conduct a Preferential Pathway Study

Task	Hours	Rate	Total
Research Utilities	. 5	\$75	\$375
Research Pipeline History	10	\$75	\$750
Research Stormdrain Locations	5	\$75	\$375
Reporting	10	\$75	\$750
Drafting	4	\$55	\$220
Clerical	4	\$45	\$180
		Total	\$2,650

Therefore, it is estimated that the cost to comply with the Regional Board's directive could range from \$5,000 to \$7,000. AMEC is currently one of three consultants selected by the Port of San Diego to provide environmental consulting services to the Port of San Diego. This implies that AMEC is qualified to prepare a preliminary site conceptual model and workplan. Because AMEC has the in-house capabilities in its San Diego office to prepare these documents, it could have prepared them "at cost" for a much lower amount than listed above.

The benefit of providing the reports is that the Regional Board will have the information it needs to determine if the discharge from the Chevron pipeline poses risks to the beneficial uses of water in San Diego Bay, to human health, and the environment. The minimal costs of preparing the reports are a reasonable burden in relationship to the need for the information on the potential impacts to water quality, human health, and the environment caused by the discharge.

8.3 Adequacy of Harding ESE Workplan

AMEC alleged (AMEC 3) that the Workplan submitted by Harding ESE on behalf of Chevron (Regional Board 5) complies with the Regional Board's directive. However, AMEC stated that "it would make practical sense...to have Chevron or its consultant revise the current workplan to meet whatever goals the Board may establish." AMEC concluded (AMEC 3) that "there is no benefit to the Board, AMEC, or other parties in providing duplicate plans. The cost of such plans outweigh any benefit the Board may derive."

On January 8, 2002, the Regional Board issued a letter (Regional Board 7) stating that the workplan submitted by Harding ESE was inadequate and did not meet the requirement of the November 13, 2001 directive (Regional Board 4). Deficiencies discussed in the January 8, 2002 letter included:

- The method proposed to delineate the horizontal and vertical extent of contaminated soil;
- The method proposed to delineate the horizontal and vertical extent of dissolved MTBE; and
- The failure to include a conduit study.

As Chevron submitted the workplan, neither the City, AMEC nor Tri-County bore any burden for producing the report. Further, if the City, AMEC and Tri-County correct the deficiencies in the report, their overall burden for producing the report will be less than if they "start from scratch." Additionally, the Regional Board has no basis to require Chevron to correct the deficiencies of the report since the Regional Board has not found that Chevron caused or permitted the discharge to occur.

8.4 Risks to the Beneficial Uses of San Diego Bay

The City cited several reasons why the discharge from the Chevron pipeline does not pose a risk to the beneficial uses of San Diego Bay. The City testified (City 3) that because groundwater contamination beneath the neighboring Lower Chevron Tank Farm poses no risk to beneficial uses of San Diego Bay, the discharge from the Chevron pipeline poses no risk to beneficial uses of San Diego Bay. The Lower Tank Farm is located approximately 200 feet west of the location of the Chevron pipeline rupture. As supporting evidence, the City included a copy of the County of San Diego Department of Environmental Health (DEH) Case Closure Summary for the Lower Tank Farm (City 3.5). Data presented in the Case Closure Summary (City 3.5) indicate that *prior* to any remedial action conducted at the Lower Tank Farm, groundwater at this facility had no detectable concentrations of total petroleum hydrocarbons as gasoline (TPHg) or diesel (TPHd), benzene, toluene, ethylbenzene, and xylenes. The maximum MTBE concentration was 370 micrograms per liter (ug/l).

With concentrations as indicated above, contaminants at the Lower Tank Farm pose no risk to the existing and potential beneficial uses of San Diego Bay. However, contaminant concentrations at the site of the pipeline rupture are likely to be significantly higher. The presence of free product on the water table resulting from the pipeline rupture most likely has resulted in dissolved petroleum hydrocarbon concentrations well above what was encountered at the Lower Tank Farm, and above the Regional Board's interim cleanup goals for sites within 1,000 feet of marine waters.

The City stated (City 3) "the lower Tank Farm lies west and closer to San Diego Bay than the Upper Tank Farm and hence indicates that the long-standing petroleum hydrocarbon plume caused by the Upper Tank Farm does not pose a threat to the Bay." Staff disagrees with this interpretation of the contaminant concentration data. A "Plume Map" included in the City's submittal (City 3.5) clearly indicates that the free product plume at the Upper Tank Farm does not extend to the Lower Tank Farm, and that the downgradient extent of the plume towards San

Diego Bay is not assessed. A more reasonable interpretation is that the free product plume at the Upper Tank Farm has not impacted groundwater quality at the Lower Tank Farm.

The City stated (City 3) that the DEH has issued a "Notice of Responsibility" (NOR) to Chevron and ARCO to cleanup the free product plume from the gasoline release at the Upper Tank Farm which predated the Chevron pipeline rupture. The NOR issued to Chevron and ARCO to conduct corrective action at the Upper Tank Farm does not relieve the City, AMEC and Tri-County from conducting legally mandated corrective action for the contamination caused by the Chevron pipeline rupture beneath Belt Street.

The City stated (City 3 and City 3.1) that "the HAZMAT Report of 2/1/01 puts the rupture at only 400 gallons after recapture," and that the "February 1, 2001 Belt Street rupture added only a minor amount to the existing plume." The Regional Board concurs that there are several estimates of the volume of gasoline released as a result of drilling into the pipeline. The estimates vary between the 400 gallons stated in the HAZMAT Report (City 3.1) to 2,730 gallons (Regional Board 2). An adequate preliminary site conceptual model and workplan would have included an evaluation of *all* estimates/documentation of the volume of product released and provided a conclusion based on the best estimate. However, because an adequate preliminary site conceptual model and workplan have not been submitted, staff cannot concur with the 400 gallon estimate.

The allegation that the "February 1, 2001 Belt Street rupture added only a minor amount to the existing plume" is irrelevant. The need to conduct corrective action is not based on the relative volume of the release. It is based on the potential threat to the existing and potential beneficial uses of San Diego Bay, to human health, and to the environment. Further, because the extent of the plume from the upper tank farm has not been fully assessed, the extent to which the release of gasoline from the Chevron pipeline added to the plume is not known.

The City stated (City 3) that because of the ongoing corrective action being conducted by ARCO and Chevron for the releases at the ARCO and Chevron Upper Tank Farms, a "Groundwater Investigation Report required...of Tri-County, AMEC, and the City is clearly over burdensome and does not bear a reasonable relationship to the benefit..." First, the Regional Board did not require a Groundwater Investigation Report, only a site conceptual model and workplan. Second, the fact that ARCO and Chevron are conducting corrective actions for the releases at the ARCO and Chevron Upper Tank Farm does not relieve the identified dischargers from their legal responsibility to conduct corrective action in response to the Chevron pipeline rupture.

Based on the analysis presented above, the burden of providing the required reports does bear a reasonable relationship to the need for the reports and the benefits of the reports.

9.0 DUE PROCESS TO TRI-COUNTY

Tri-County stated (Tri-County 1) that because they were not present at a meeting held on July 20, 2001, among the Regional Board staff, the City, and AMEC, and because they were not given a "transcript or minutes of this meeting," they were not given the same due process as the

City and AMEC. Tri-County also stated (Tri-County 1) that it "was named as a responsible party based on the information presented to the board on 7-20-01 by others and without any contact with [Tri-County] by the board prior to the 11-13-02 notification letter."

On October 12, 2001, Mr. Barry Pulver of the Regional Board called Mr. Tim Duddie of Tri-County to inform him that Tri-County would be issued a directive by the Regional Board to take corrective action in response to the Chevron pipeline rupture (Regional Board 3). Mr. Pulver explained the Regional Board's basis for holding Tri-County responsible for the discharge. Therefore, Tri-County's assertion that there was no contact by the Regional Board prior to the November 13, 2001 letter is untrue. Between October 12 and November 11, 2001, when the directive was issued, Tri-County had ample time to provide information to the Regional Board to refute the Board's finding that Tri-County was responsible for the discharge. Further, in hearing the issues discussed in this decision, Tri-County was provided due process to refute the Regional Board's conclusion.

10.0 SUMMARY

The Chevron pipeline rupture was caused directly by Tri-County drilling into the pipeline. Thus, Tri-County caused or permitted the discharge to occur.

AMEC hired Tri-County to do the soil borings for AMEC's investigation, selected the soil boring location, and directed Tri-County to drill the soil borings for AMEC's geotechnical investigation. AMEC did not use reasonable care to ensure that the boring location was clear of underground utilities and improvements, including the Chevron pipeline. Thus, AMEC caused or permitted the discharge to occur.

The City hired AMEC and directed it to drill the soil boring that resulted in the pipeline rupture. Further, the City had documents from Chevron showing the location of the underground pipeline, which the City could have provided to AMEC. Thus, the City caused or permitted the discharge to occur.

Although Chevron failed to comply with State law and register the underground pipeline with USA, this was not the sole and proximate cause of the pipeline rupture. The failure to register the pipeline did not cause the rupture to occur because Chevron gave the City direct information about the location of the pipelines beneath Belt Street. Thus, Chevron did not cause or permit the discharge to occur.

The terms and conditions of the contracts among the City, AMEC and Tri-County have no relevance to this analysis because the contracts do not affect the parties' responsibility under Water Code sections 13267 or 13304.

The reports required by the Regional Board pursuant to Water Code section 13267 are necessary to assess the threat of pollution associated with the discharge and ensure that the subsequent investigation actions are warranted and appropriate.

These documents are typically the initial step of any investigation, and commonly prepared by environmental consulting firms such as AMEC. The costs for the workplan and site conceptual model is estimated to be approximately \$7,000. This cost is reasonable in view of the potential for pollution and contamination associated with discharges of gasoline within 800 feet of San Diego Bay. These documents could be prepared by AMEC, "at cost" resulting in a much lower price then if the documents were prepared by a hired consultant. These costs are minor and bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports.

11.0 CONCLUSIONS

- 1. The City of San Diego caused or permitted the discharge of petroleum fuel waste within the San Diego region because the City selected an alignment for its Belt Street water line replacement project in an area known to the City to contain Chevron's underground pipeline. The pipeline was broken/ruptured as a direct result of the City's implementation of its water line replacement project.
- 2. AMEC Earth and Environmental, Inc. caused or permitted the discharge of petroleum fuel waste within the San Diego region because AMEC selected the boring location within the water line replacement project alignment and failed to exercise reasonable care as a professional geotechnical consultant to identify and locate unregistered underground utilities.
- 3. Tri-County Drilling, Inc. caused or permitted the discharge of fuel waste within the San Diego region because it drilled into the pipeline causing it to rupture.
- 4. While Chevron Products Company, failed to comply with the regional notification center system requirements pursuant to Government Code 4216.7, such failure was not the sole and proximate cause of the rupture or discharge because Chevron gave the City actual notice of the presence of Chevron's underground installations beneath Belt Street by providing maps of the underground pipeline to the City to assist the City with a similar geotechnical investigation for a sewer replacement project beneath Belt Street.
- 5. The burden of providing the required reports bears a reasonable relationship to the need for the reports and the benefits of the reports because the costs are relatively minor and are justified by the need to assess whether or not the discharge poses a risk to the beneficial uses of San Diego Bay, human health, and the environment.



California Regional Water Quality Control Board

San Diego Region

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